A low-cost versatile system for continuous real-time respiratory activity measurement as a tool in environmental research

Tamara Djerdj[1], Vesna Peršić[1], Davorka K. Hackenberger[1], Domagoj K. Hackenberger[1], Branimir K. Hackenberger[1,*]

[1] *Josip Juraj Strossmayer University of Osijek, Department of Biology, Cara Hadrijana 8/A, HR-31000 Osijek, Croatia*

[*] *To whom correspondence should be addressed at Josip Juraj Strossmayer University of Osijek, Department of Biology, Cara Hadrijana 8/A, 31000 Osijek, Croatia*

Fax: +385 31 399-939. Phone: +385 31 399-910. E-mail: hackenberger@biologija.unios.hr

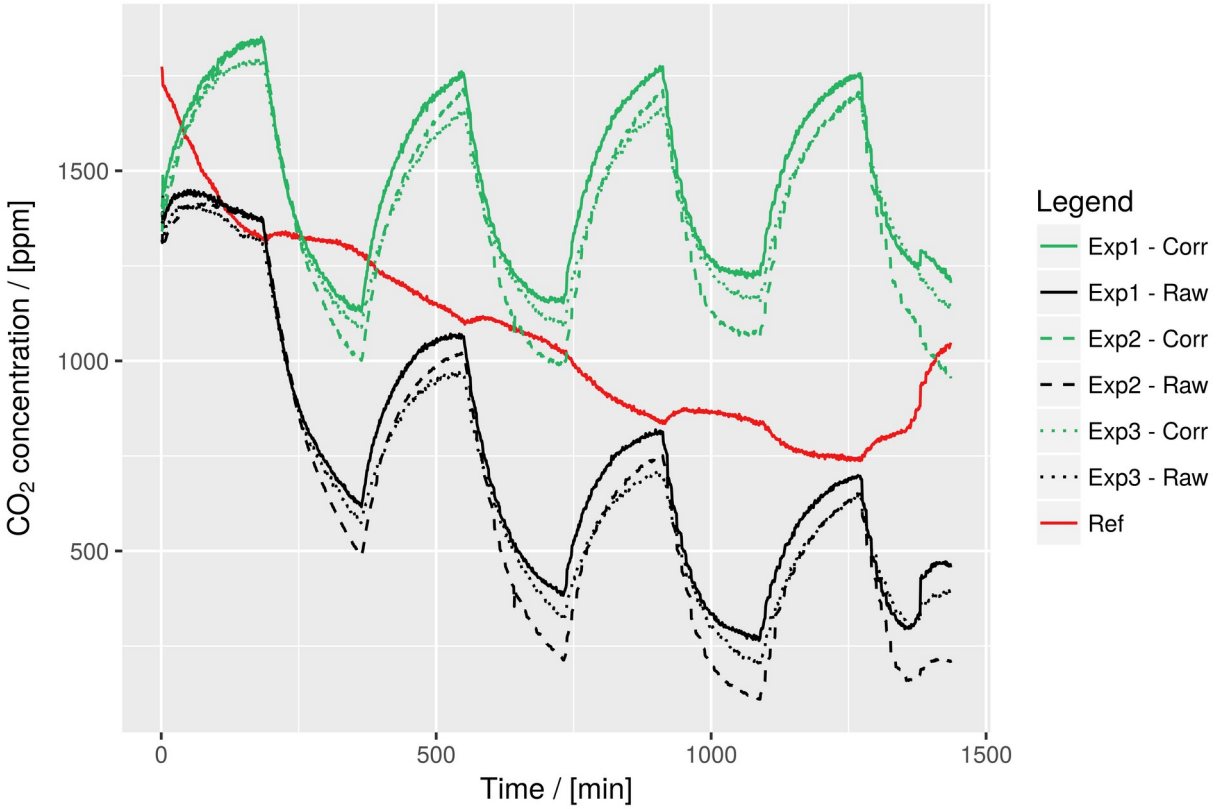

Figure 1: Results of sensor correction algorithm applied on raw sensor data. Noise created from CO_2 fluctuations in the ambient where measurements are performed is detected by the referent sensor (red line), whose readings are used to correct raw sensor readings (black lines) resulting in stable corrected CO_2 concentration values (green lines).